

Inventors: Mazar and Jones
Serial No.: 09/670,537
Page No.: 10

REMARKS

Claims 1 to 49 are pending in the present application. Claims 1 to 20, 24, 26, 28, 30, 32 to 34, 37, 40, 42, 44, 46 and 48 have been withdrawn from consideration. Claims 22, 25, 35, and 36 have been amended herein. Upon entry of the amendment, claims 21 to 23, 25, 27, 29, 31, 35, 36, 38, 39, 41, 43, 45, 47 and 49 will remain under examination.

Regarding the amendments

Claim 22 has been amended to recite "(chelator)" in place of "(chelator (empty))." This amendment is supported in the specification, for example, at page 20, lines 19-22. Claim 25 has been amended to remove dependence on claims 13 and 16, which have been withdrawn from consideration. Claims 35 and 36 have been amended to replace the phrase "uPAR targeting" with "uPA active site targeting" to be consistent with claims 21 and 23, from which claims 35 and 36 depend. This amendment to claims 35 and 36 is supported, for example, by claims 21, 23, 35 and 36 as originally filed.

As set forth above, the amendments are fully supported by the specification and claims as originally filed and do not introduce new matter. Accordingly, entry of the amendments is respectfully requested.

Inventors: Mazar and Jones
Serial No.: 09/670,537
Page No.: 11

Rejection Under 35 U.S.C. § 112, second paragraph

The rejection of claim 22 under 35 U.S.C. § 112, second paragraph, as allegedly indefinite is respectfully traversed. Applicants submit that claim 22 is clear and definite as written.

The Office Action alleges that claim 22 is unclear for reciting the term "chelator_(empty)." Applicants submit that the term "chelator_(empty)" is clear in view of the teaching in the specification that an "empty" chelator is one that does not carry an imageable label or therapeutic moiety (page 20, lines 19-22). Nevertheless, claim 22 has been amended herein to recite a "chelator" in place of "chelator_(empty)." Applicants therefore request removal of this rejection under 35 U.S.C. § 112, second paragraph.

Regarding the rejections under 35 U.S.C. § 102

The rejection of claims 21, 23, 35 and 36 under 35 U.S.C. § 102(b), as allegedly anticipated by Higgins et al., Archives of Biochemistry and Biophysics 249(2):418-426 (1986) is respectfully traversed. Applicants respectfully submit that Higgins et al. does not teach the claimed invention. Claims 21, 23, 35 and 36 are directed to uPA active site-targeting peptide compounds and methods of use; the uPA active site-targeting peptide compounds have the ability to bind to the endosite and one or more exosites of tcuPA or a fragment or subunit thereof. In contrast, Higgins et al. describes labeling **t-PA**, with a

Inventors: Mazar and Jones
Serial No.: 09/670,537
Page No.: 12

fluorescence compound and using fluorescence methods for discerning differences between the active site regions of one-and two-chain t-PA. Whereas "tcuPA" as recited in claim 21 refers to a two chain form of uPA (see specification, page 1, lines 24-26), the "t-PA" described in Higgins et al. refers to tissue plasminogen activator (see Higgins et. al., page 418, first sentence). Thus, Higgins et al. lacks description of a uPA active site-targeting compound that binds to the endosite and one or more exosites of tcuPA. For this reason, Applicants submit that claims 21, 23, 35 and 36 are novel over the cited reference.

The rejection of claims 21, 23, 35, 36, 38, 39, 41 and 43 under 35 U.S.C. § 102(b), as allegedly anticipated by Ploug et al., Biochemistry 37:3612-3622 (1998), is respectfully traversed. Applicants respectfully submit that Ploug et al. fails to teach a uPA active site-targeting peptide that binds to the endosite and one or more exosites of tcuPA or a fragment or subunit thereof. Instead, Ploug et al. describes an antagonist that binds to the **receptor for suPA**, which is structurally and functionally distinct from tcuPA (page 3615, first paragraph, first sentence). Because Ploug et al. lacks any teaching of a compound that binds to the endosite and one or more exosites of tcuPA or a fragment or subunit of tcuPA, the reference cannot anticipate claims 21, 23, 35, 36, 38, 39, 41 and 43.

The rejection of claims 21 to 23, 25, 27, 29, 31, 35, 36, 38, 39, 41, 43, 45, 47 and 49 under 35 U.S.C. § 102(b), as allegedly anticipated by Rabbani et al. (WO 99/485509), is

Inventors: Mazar and Jones
Serial No.: 09/670,537
Page No.: 13

respectfully traversed.. Regarding claims 35, 36, 38, 39, 41, 43, 45, 47 and 49, Applicants respectfully point that claims 35 and 36 have been amended to replace the term "uPAR-targeting" with "uPA active site-targeting" to be consistent with claims 21 and 23, from which claims 35 and 36 depend. Therefore, each of claims 21 to 23, 25, 27, 29, 31, 35, 36, 38, 39, 41, 43, 45, 47 and 49 is directed to a composition or method of use relating to peptide compounds that bind to tcuPA or a fragment of subunit thereof. In contrast, Rabbani et al. describes molecules that bind specifically to the uPA receptor (uPAR), such as antibodies and uPA protein fragments that bind to the uPA receptor (page 8, lines 33-36; page 12, lines 8-10). Without a teaching or suggestion of the claimed uPA active site-targeting peptide compounds, Rabbani et al. cannot anticipate the claimed invention.

The rejection of claims 21 to 23, 25, 27, 29, 31, 35, 36, 38, 39, 41, 43, 45, 47 and 49 under 35 U.S.C. § 102(b), as allegedly anticipated by Jones et al. (WO 98/21230), is respectfully traversed. Applicants respectfully point out that claims 35 and 36, as amended, recite "uPA active site-targeting" pharmaceutical compositions, consistent with claims 21 and 23. Applicants submit that Jones et al. does not teach or suggest the claimed compositions and methods of use relating to the recited "uPA active site-targeting" peptide compounds. Rather, Jones et al. describes compounds that bind to the uPA receptor (uPAR) (page 6, lines 24-27). None of the compounds described in Jones et al. bind to the endosite and one or more exosites of tcuPA or a fragment or subunit of tcuPA. For this reason,

Inventors: Mazar and Jones
Serial No.: 09/670,537
Page No.: 14

Applicants submit that claims 21 to 23, 25, 27, 29, 31, 35, 36, 38, 39, 41, 43, 45, 47 and 49 are novel over Jones et al.

In view of the above, Applicants respectfully request removal of the rejections under 35 U.S.C. § 102(a).

Inventors: Mazar and Jones
Serial No.: 09/670,537
Page No.: 15

CONCLUSION

In light of the amendments and remarks herein, Applicants submit that the claims are now in condition for allowance and respectfully request a notice to this effect. Should the Examiner have any questions, he is invited to the undersigned agent or Cathryn Campbell.

Respectfully submitted,

Date: March 3, 2004

Pamela M. Guy

Pamela M. Guy
Registration No. 51,228
Telephone: (858) 535-9001
Facsimile: (858) 535-8949

McDERMOTT, WILL & EMERY
4370 La Jolla Village Drive, Suite 700
San Diego, California 92122